

A new genus of the family Theridiidae (Arachnida: Araneae)

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Abstract — A new genus of the family Theridiidae is described under the name of *Yunohamella*. Three species, *Yunohamella yunohamensis* (Bösenberg & Strand 1906), *Y. subadulta* (Bösenberg & Strand 1906) and *Y. lyrica* (Walckenaer 1842), are newly transferred from *Takayus* Yoshida 2001.

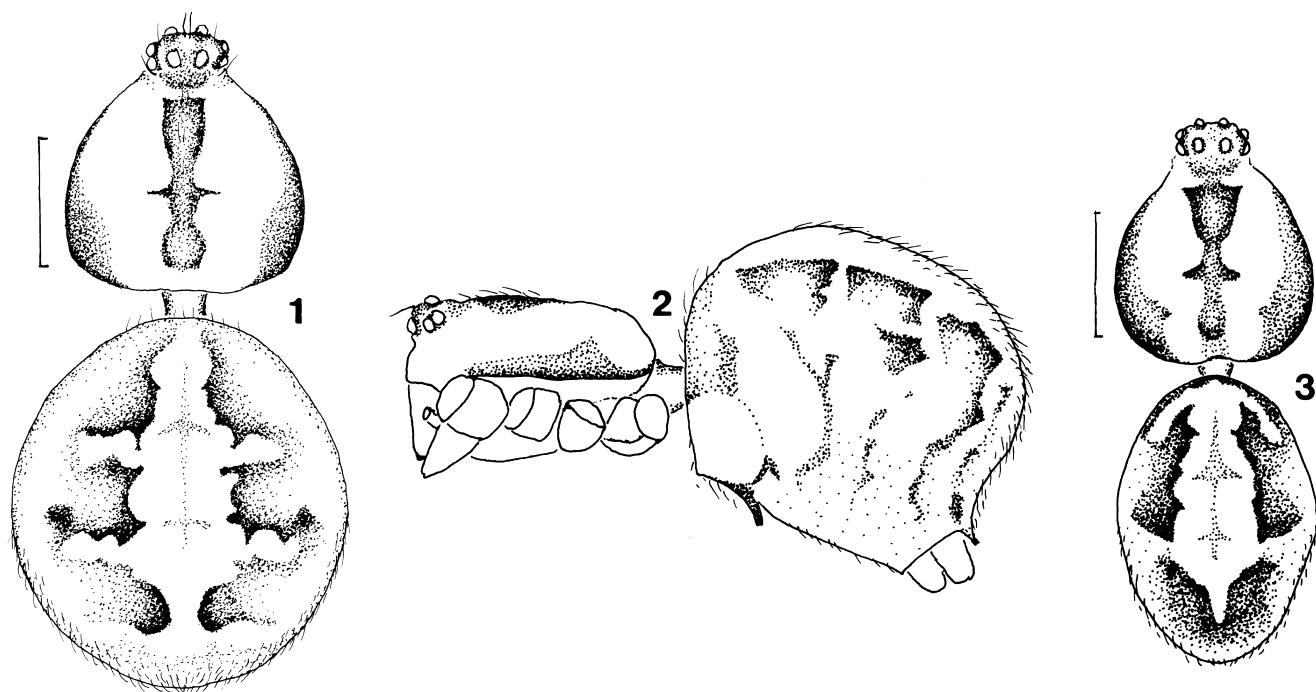
Key words — *Yunohamella*, Theridiidae, new genus, new combination

In my previous paper (Yoshida 2001), I described a new genus *Takayus* on the basis of the following characteristics: epigynum with a small scapus, embolus of male palpus thick, not circulated, and conductor and large tegulum of male palpus forming one sclerite. I also designated two species groups in this genus, those are the *takayensis* group and the *yunohamensis* group.

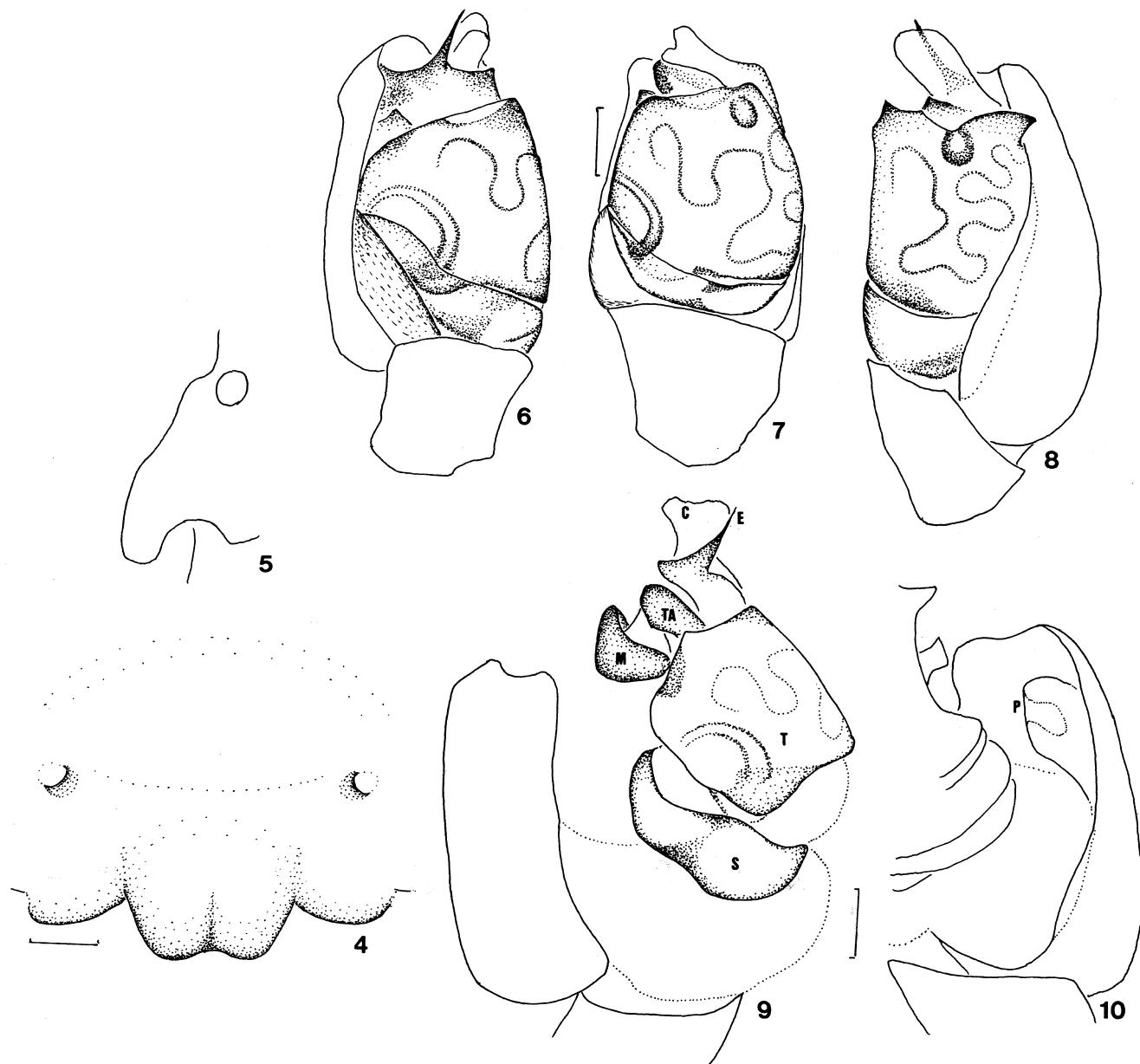
Characteristics of the *takayensis* group are bright color of body, feather-like flecks on abdomen, a pointed scapus of epigynum, and a thick embolus and a large tegular apophysis of male palpus (Yoshida 2003, figs. 222–232, 569–571, 602–606). Contrary to these, the *yunohamensis* group has many different characteristics from the *takayensis*

group, which are dark color of body, wavy cardiac pattern on abdomen, blunt or without scapus of epigynum, and a thin embolus and a small tegular apophysis of male palpus (Figs. 1–10; Yoshida 2003, figs. 233–242, 530, 572–573). In addition to these, spiders of the *takayensis* group make webs in bushes, but those of the *yunohamensis* group usually live on precipices of rocks. I consider that the differences between the two groups correspond to the level usually recognized between the genera in the family Theridiidae. In this paper, I wish to establish a new genus on the basis of the species group of *T. yunohamensis* of the genus *Takayus* designated by Yoshida (2001).

As a result of this division, the genus *Takayus* (s. str.)



Figs. 1–3. *Yunohamella yunohamensis* (Bösenberg & Strand 1906), ♀♂ from Mujinamori, Kaminoyama-shi, Yamagata Prefecture, Japan, 7-VI-2003, H. Yoshida leg. — 1–2, Female, dorsal (1) and lateral (2) views; 3, male, dorsal view. Scales: 1 mm.



Figs. 4–10. *Yunohamella yunohamensis* (Bösenberg & Strand 1906), ♀♂ from Mujinamori, Kaminoyama-shi, Yamagata Prefecture, Japan, 7-VI-2003, H. Yoshida leg. — 4–5, Epigynum, ventral (4) and lateral (5) views; 6–8, male left palpus, prolateral (6), ventral (7) and retrolateral (8) views; 9–10, same (expanded), prolateral (9) and ventro-retrolateral (10) views. Abbreviations: C, conductor; E, embolus; M, median apophysis; P, paracymbium; S, subtegulum; T, tegulum; TA, tegular apophysis. Scales: 0.1 mm.

consists of four Japanese species (*takayensis*, *chikunii*, *latifolius* and *fujisawai*) and ten Chinese ones (*kunmingicus*, *naevius*, *lushanensis*, *xui*, *linimaculatus*, *wangi*, *sublatifolius*, *lunulatus*, *huanrenensis* and *quadrifaculatus*). Three species listed below are newly transferred from *Takayus* to the new genus.

***Yunohamella* new genus**
[Japanese name: Yunohama-himegumo zoku]

Diagnosis. The present new genus resembles *Takayus*

Yoshida 2001 (s. str.), but is distinguished from the latter by the following characteristics: color of body basically dark, epigynum without a pointed scapus or with a blunt scapus, and male palpus with a thin embolus and a small tegular apophysis. This genus is similar to *Theridion* Walckenaer 1805 (s. str.) in general appearance, but is distinguishable from it by male palpus with a short and straight embolus, a large tegulum and a conjugated conductor with tegulum, and also by epigynum without depression. In *Theridion*, male palpus with a long and circular embolus, a not large tegulum and a separated conductor, and epigynum with a

distinct depression.

Description. Carapace oval and dark. Abdomen globular, and dark, with distinct red to dark brown cardiac pattern (Figs. 1–3; Yoshida 2003, figs. 530, 572–573). Leg formula, 1, 4, 2, 3 in female, 1, 2, 4, 3 in male. Colulus absent. Female genital organ: epigynum with a wide scapus (*yunohamensis*) or without scapus (*subadulta* and *lyrica*), epigastric area with chitin plate; depression indistinct, a pair of openings situated on the middle of atriolum, seminal receptacles oval, duct not long (Figs. 4–5; Yoshida 2003, figs. 233–234, 236–237, 239–240). Male palpus: embolus, conductor, median apophysis, tegulum, tegular apophysis, subtegulum, cymbium and paracymbium present, embolus straight and short, conductor membranous and supporting embolus as guide, tegulum large, tegular apophysis small, paracymbium hooded (Figs. 6–10; Yoshida 2003, figs. 235, 238, 241–242).

Three species, *Yunohamella yunohamensis* (Bösenberg & Strand 1906), *Y. subadulta* (Bösenberg & Strand 1906) and *Y. lyrica* (Walckenaer 1842), are newly transferred from *Takayus*. These species are chiefly known from Japan and Korea, though *Y. lyrica* is also distributed in North America.

Type species. *Theridion yunohamense* Bösenberg & Strand 1906.

Etymology. The generic name is derived from “Yunohama”, which is a type locality of the type species, and is feminine in gender. “Yunohama” is now considered as a misreading for “Yunoharu” which is located in Saga Prefecture, Kyushu.

Yunohamella yunohamensis

(Bösenberg & Strand 1906) **new combination**
[Japanese name: Yunohama-himegumo]
(Figs. 1–10)

Theridium yunohamense Bösenberg & Strand 1906, p. 145, pl. 10, fig. 185 (holotype: ♀ from Yunohama, Saga, Japan).

Theridion yunohamense: Saito 1941, p. 194, fig. 228; Yaginuma 1960, p. 37, pl. 10, fig. 58, text-fig. 35; Yaginuma 1986, p. 35, pl. 8, fig. 8, text-fig. 20–4; Chikuni 1989, p. 42, fig. 57.

Takayus yunohamensis: Yoshida 2001, p. 167, fig. 5; Yoshida 2003, p. 95, figs. 233–235, 572.

Note. Carapace brown with median and marginal black flecks. Abdomen with reddish cardiac pattern and black flecks (Figs. 1–3). Epigynum with one pair of openings on the middle of sclerotized plate; plate posteriorly projecting (Figs. 4–5). Male palpus with membranous conductor and large tegulum (Figs. 6–10).

Distribution. Japan: Hokkaido, Honshu, Shikoku and Kyushu. Korea and Saghalin.

Yunohamella subadulta

(Bösenberg & Strand 1906) **new combination**
[Japanese name: Koke-himegumo]

Theridium subadultum Bösenberg & Strand 1906, p. 147, pl. 5, fig. 42 (holotype: ♀ from Saga, Japan, 28-X-1883, Dönitz leg.).

Theridion subadultum: Saito 1941, p. 190, fig. 224; Yaginuma 1960, p. 37, pl. 10, fig. 61; Yaginuma 1986, p. 35, pl. 8, fig. 4, text-fig. 19–12; Chikuni 1989, p. 44, fig. 63.

Takayus subadultus: Yoshida 2001, p. 167, fig. 6; Yoshida 2003, p. 97, figs. 236–238, 573.

Distribution. Japan: Hokkaido, Honshu, Shikoku and Kyushu. Korea and the Kurile Islands.

Yunohamella lyrica (Walckenaer 1842) **new combination**

[Japanese name: Shimofuri-himegumo]

Theridion lyricum Walckenaer 1842, p. 288 (holotype: ♀ from Georgia, U. S. A.) — Yoshida 1987, p. 13, figs. 1–2; Chikuni 1989, p. 44, fig. 63.

Takayus lyricus: Yoshida 2001, p. 167; Yoshida 2003, p. 97, figs. 239–242, 530.

Note. This species was originally described from North America, and is also distributed widely in Japan.

Distribution. Japan: Honshu, Kyushu and Iriomote Is. of the Nansei Islands. Korea and North America.

References

- Bösenberg, W. & Strand, E. 1906. Japanische Spinnen. Abh. Senck. Naturf. Ges., 30: 93–422, pls. 3–10.
- Chikuni, Y. 1989. Pictorial Encyclopedia of Spiders in Japan. Kaiseisha, Tokyo, 310 pp. (In Japanese)
- Saito, S. 1941. Fauna Nipponica Vol. IX, Fas. II, No. II, Suborder Arachnomorphae, Tertasticra Trionycha I, Class Arachnoidea, Order Araneina. Sanseido, Tokyo, 220 pp. (In Japanese)
- Walckenaer, C. A., 1842. Histoire naturelle des insectes, aptères, Tome II. Paris, 549 pp.
- Yaginuma, T. 1960. Spiders of Japan in Colour. Hoikusha, Osaka, vi + 186 + 8 pp., 54 pls. (In Japanese)
- Yaginuma, T. 1986. Spiders of Japan in Color (new ed.). Hoikusha, Osaka, xxiv + 305 pp., 64 pls. (In Japanese)
- Yoshida, H. 1987. The occurrence of *Theridion lyricum* Walckenaer, 1841, in Japan. Atypus, 89: 13–16. (In Japanese)
- Yoshida, H. 2001. A revision of the Japanese genera and species of the subfamily Theridiinae (Araneae: Theridiidae). Acta Arachnol., 50: 157–181.
- Yoshida, H. 2003. The Spider Family Theridiidae (Arachnida: Araneae) from Japan. The Arachnological Society of Japan, Osaka, 224 pp. (In Japanese)

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